**Enhancing the Research-to-Operations Process to Support Global and Domestic Missions through the Aviation Weather Testbed**

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Previous methods of development and implementation of aviation weather research, sponsored by the FAA, have become unsustainable with the evolution of computing methods and increased horizontal and vertical resolutions in numerical models. These research-to-operations (R2O) methods relied heavily on the limited computing and support resources at the NOAA Aviation Weather Center (AWC) and Aviation Weather Testbed (AWT). In collaboration with the FAA Aviation Weather Research Program, a new process is being advanced to enhance the collaboration between researchers external to NOAA and the NCEP Service Centers and testbeds. One such collaboration between the FAA, AWT, and NOAA Environmental Modeling Center is the transition of model based aviation hazard forecasts from internal applications at AWC to the Unified Post Processor at NCEP Central Operations to support both mesoscale and global modelling.

Additionally, the AWT has constructed an internal tracking document to support such R2O efforts, including NGGPS based implementations. This allows the AWT the ability to efficiently track and progress any R2O efforts, which can increase collaborative communication. This new paradigm will provide an opportunity to communicate a common implementation standard and procedure from supporters, to implementers, back to developers, making the R2O process for new aviation forecast guidance more efficient.